## INTRODUCTION

Section One of this report describes the conservation problems that face salmon and steelhead trout throughout California. In this section, fish conservation in specific geographic regions of the state is discussed.

California's "salmon and steelhead trout country" is spread throughout several geographically distinct regions of the state. To facilitate research, the Advisory Committee divided California into eleven (11) geographic regions, areas with common biological features and relationships. As information was gathered, it made sense to approach the Klamath and Trinity rivers as a natural unit; consequently, numbers two and three (see map) have been treated as one basin in the discussion that follows.

A subcommittee was formed to study each one of the basins described and to seek out local specialists and volunteers to conduct specific studies and projects. Local involvement has formed the foundation of these investigations to assure that plans and recommendations have a strong base of local support.

Local involvement in projects has been extensive, in most cases, with hundreds of professionals, fishermen and citizens sharing responsibilities for the work.

## Smith River, Redwood Creek, and Mad River Region

The Setting

Located in extreme northwestern
California, the north coast basins
include the following Del
Norte and Humboldt county
watersheds: Smith River,
Redwood Creek, Little River,
Mad River, Jacoby Creek,

Freshwater Creek, Elk River, Salmon Creek and the smaller Humboldt Bay tributary streams. Except for the streams that pass through Humboldt Bay communities, these are wildland watersheds, devoted primarily to livestock grazing, timber production, National Forest and park uses.

## **The Problems**

The Smith River is the largest and most productive of the streams in this group. Most of its watershed lies within the Six Rivers and Siskiyou National Forests. The Smith, which has been included in the federal Wild and Scenic Rivers System, supports heavy rec-

reational use—particularly camping. Fishing for "summer trout" is popular and draws many visitors to the area. Unfortunately, much of this fishing activity centers on juvenile salmon and steelhead that remain in the area during part of their life cycle. Education programs and angling regulations should be developed to discourage take of juvenile salmonids so they may survive, mature, provide food and sport as adults, and return to spawn two years later.

Salmon and steelhead habitat in Redwood Creek has been heavily damaged by extensive logging on the watershed's steep, highly erodible slopes. With creation of the Redwood National Park, Congress authorized a 1 5-year, \$33 million watershed rehabilitation program that will substantially improve fish habitat within the park boundaries. Unfortunately, no similar improvement program exists for the remaining 65% of the drainage, which is in private timber management.

In recent decades, Mad River salmon and steelhead have had a troubled history. King salmon spawning runs past old Sweasey Dam exceeded 3,000 fish during the 1940's, but dropped to just 19 fish in 1959. Construc-

tion of a municipal water supply reservoir near Ruth in the early 1960's altered the river's flow and degraded its water quality. Demolition of Sweasey Dam in 1970 exacerbated these problems by filling the river with sediment and covering the spawning gravels. The state built Mad River Hatchery in 1970, not as a mitigation hatchery, but rather, to increase the region's salmon population. The hatchery has not been able to increase salmon numbers, but it has significantly increased the Mad River steelhead crop.

In general, all of the Humboldt Bay tributaries have suffered from the effects of logging, grazing and land development. During the past decade, however, local citizens have initiated some very promising restoration projects on several of these streams.

The north coast region offers some extraordinary resources for developing and expanding fish conservation and restoration projects. Humboldt State University has renowned programs in fisheries education, research and extension. State and federal land management and fisheries conservation agencies are well-represented throughout the region. Angling organizations, service clubs and commercial fishing groups are very active and have already established many stream and restocking projects. improvement Collectively, these resources can make a solid contribution to the salmon and steelhead trout restoration program.

Capitalizing on the strong interest in fish conservation among these groups and the area's teachers, the Advisory Committee sponsored the development of an interdisciplinary classroom teaching unit about salmon and steelhead trout. The unit has been tested in classrooms throughout northern California and shows promise in creating greater awareness of salmon and steelhead conservation problems and opportunities.

## **The Solutions**

ACTION: It is essential to develop public awareness programs throughout the north coast basin to reduce the take of "summer trout," which are, in fact, juvenile salmon and steelhead ocean-bound migrants.

ACTION: It is reasonable to adjust angling seasons and catch limits in the affected streams of this region, by adopting the more restrictive regulations used by neighboring Oregon.

ACTION: The Department of Fish and Game should encourage and facilitate the use of the classroom curriculum developed by the Advisory Committee to expand community knowledge of and support for salmon and steelhead conservation and restoration efforts

"... Public enthusiasm for stream and fish restoration in these and other California watersheds reveals a poignant part of human nature: things are frequently prized more fully when they are lost or nearly lost..."